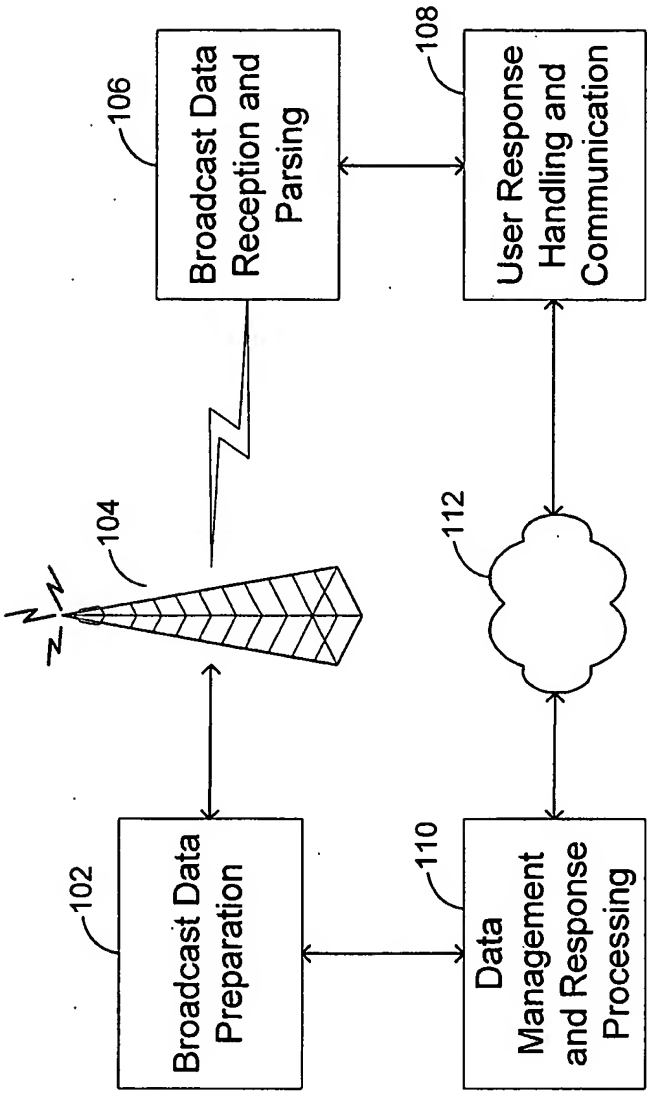

Broadcast Data Preparation
102
Broadcast Data Reception and Parsing
106
Data Management and Response Processing
110
User Response Handling and Communication
108
104
112

FIG. 1

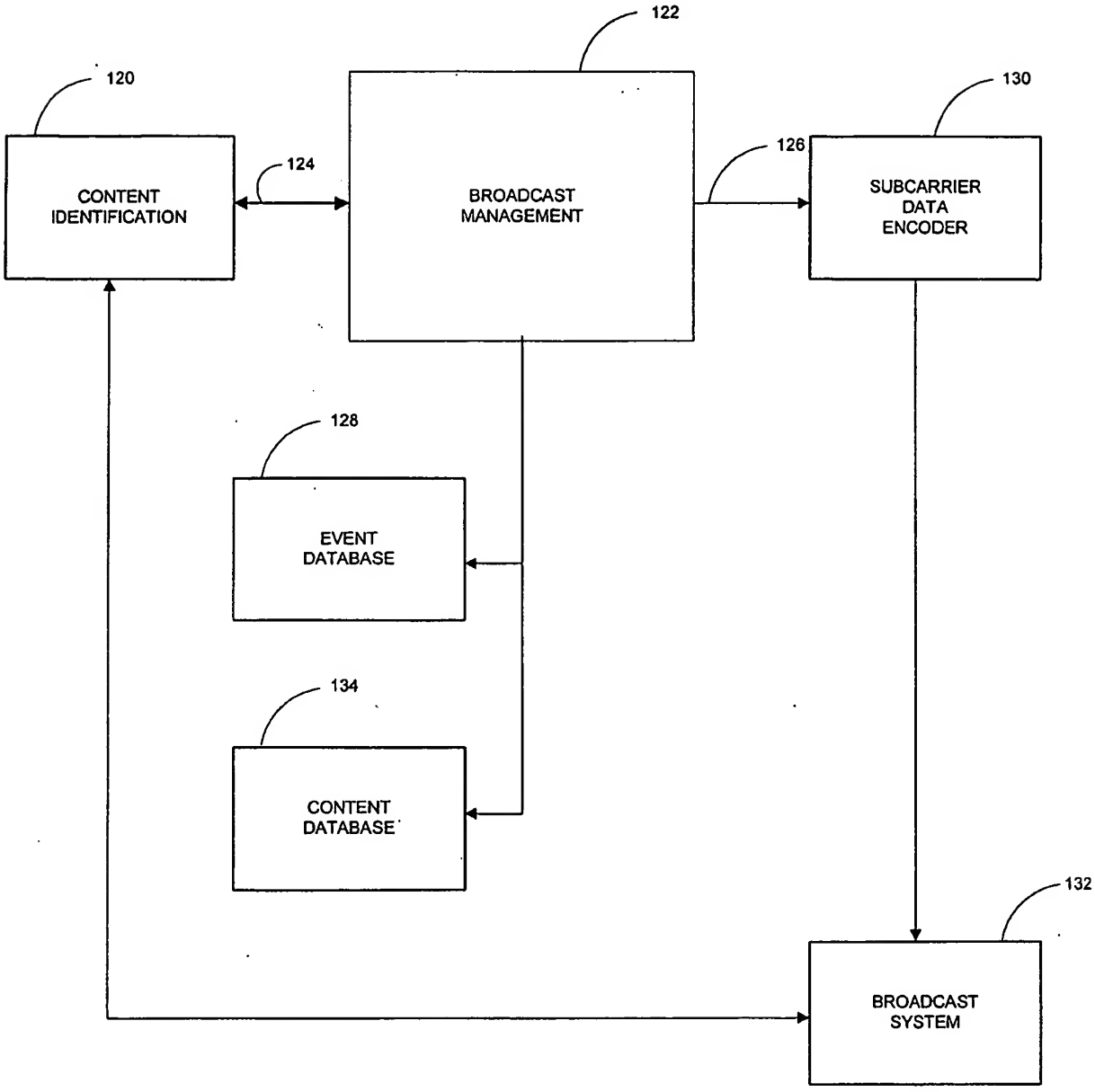

120
122
130
CONTENT IDENTIFICATION
124
BROADCAST MANAGEMENT
126
SUBCARRIER DATA ENCODER
128
EVENT DATABASE
134
CONTENT DATABASE
132
BROADCAST SYSTEM

FIG.2

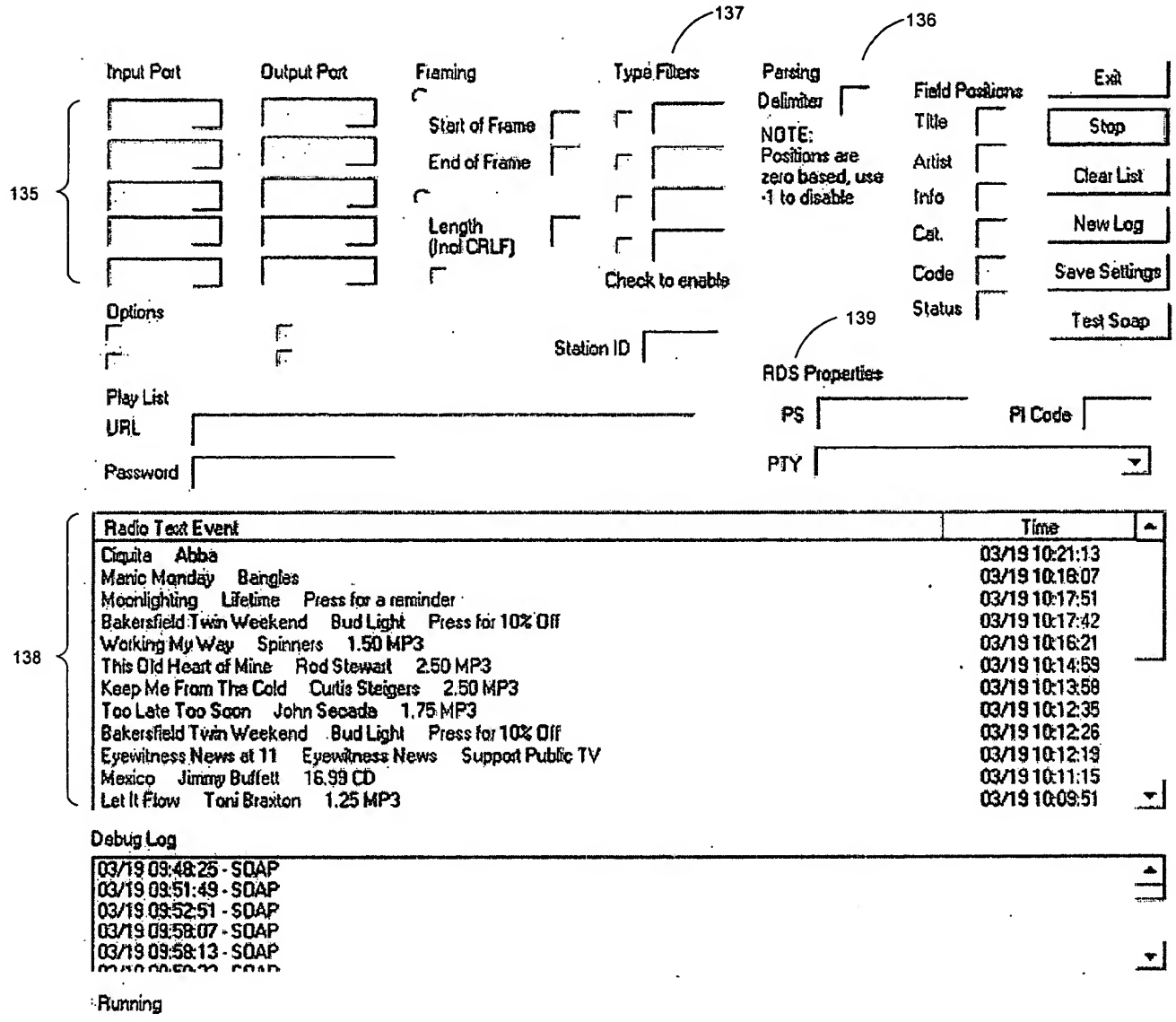

137
136
Input Port
Output Port
Framing
Type Filters
Parsing
Delimiter
Field Positions
Exit
Start of Frame
End of Frame
NOTE:
Positions are
zero based, use
-1 to disable
Title
Stop
135
Artist
Clear List
Length
(Incl CRLF)
Info
New Log
Cat.
Code
Save Settings
Check to enable
Status
Test Soap
Options
Station ID
139
RDS Properties
Play List
URL
PS
PI Code
Password
PTY
Radio Text Event
Time
138
Ciquita Abba 03/19 10:21:13
Manic Monday Bangles 03/19 10:16:07
Moonlighting Lifetime Press for a reminder 03/19 10:17:51
Bakersfield Twin Weekend Bud Light Press for 10% Off 03/19 10:17:42
Working My Way Spinners 1.50 MP3 03/19 10:16:21
This Old Heart of Mine Rod Stewart 2.50 MP3 03/19 10:14:59
Keep Me From The Cold Curtis Steigers 2.50 MP3 03/19 10:13:58
Too Late Too Soon John Secada 1.75 MP3 03/19 10:12:35
Bakersfield Twin Weekend Bud Light Press for 10% Off 03/19 10:12:26
Eyewitness News at 11 Eyewitness News Support Public TV 03/19 10:12:19
Mexico Jimmy Buffett 16.99 CD 03/19 10:11:15
Let It Flow Toni Braxton 1.25 MP3 03/19 10:09:51
Debug Log
03/19 09:48:25 - SOAP
03/19 09:51:49 - SOAP
03/19 09:52:51 - SOAP
03/19 09:58:07 - SOAP
03/19 09:58:13 - SOAP
Running

FIG.3

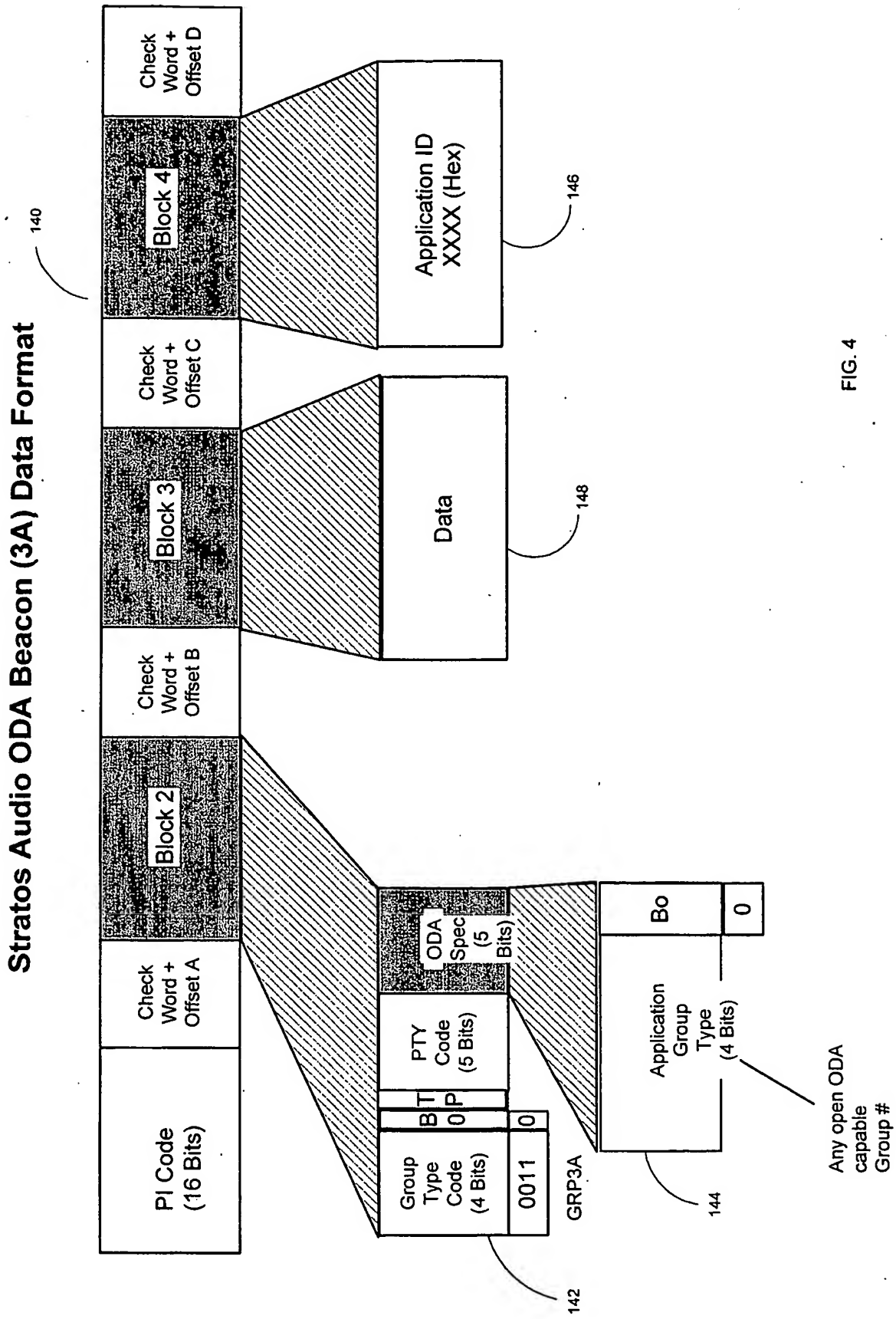

Stratos Audio ODA Beacon (3A) Data Format
140
PI Code (16 Bits)
Check Word + Offset A
Block 2
Check Word + Offset B
Block 3
Check Word + Offset C
Block 4
Check Word + Offset D
Group Type Code (4 Bits)
B
T
0
P
PTY Code (5 Bits)
0011
0
ODA Spec (5 Bits)
GRP3A
Application Group Type (4 Bits)
Bo
0
144
Any open ODA capable Group #
142
Data
148
Application ID XXXX (Hex)
146

FIG. 4

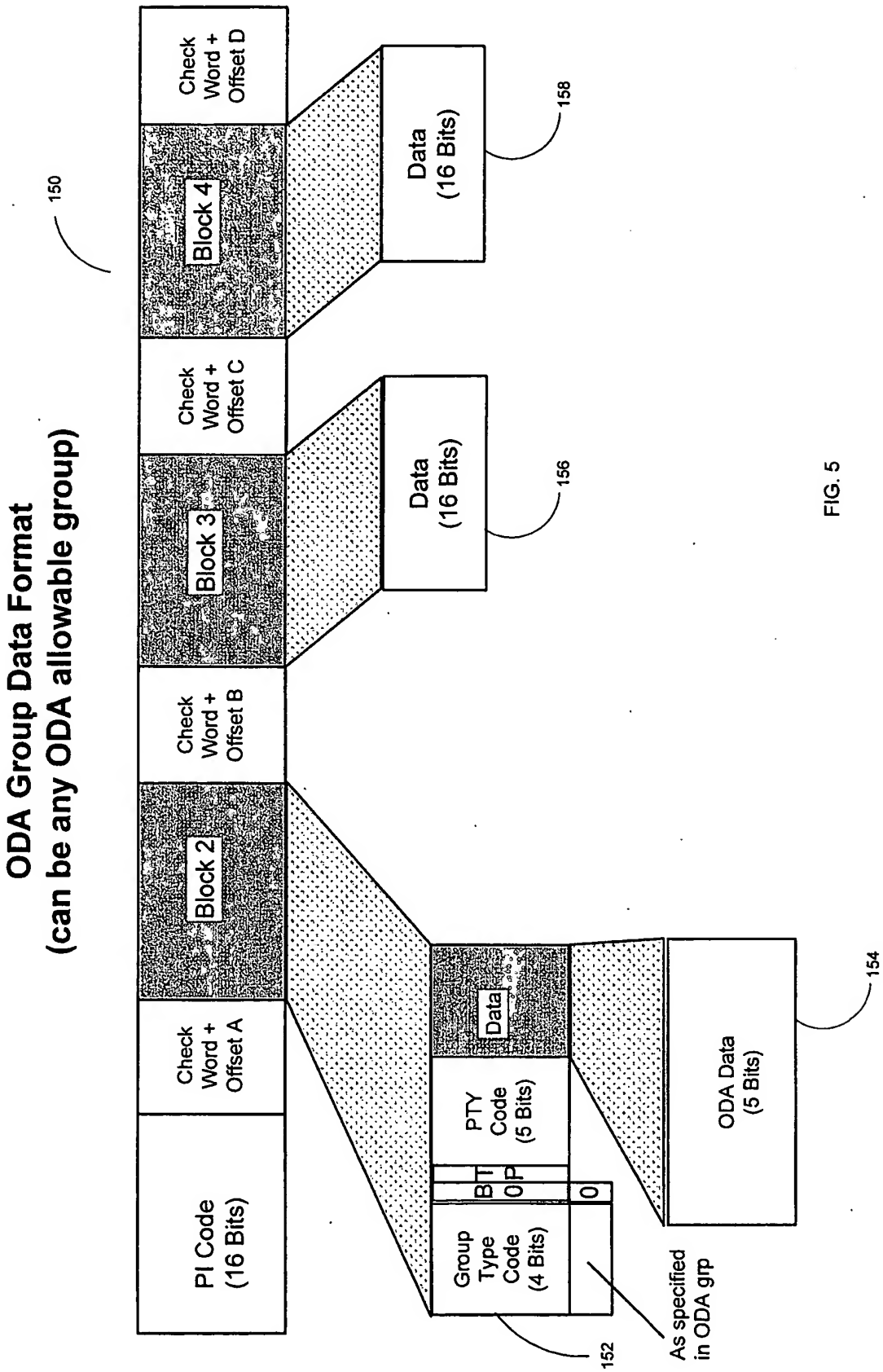

ODA Group Data Format
(can be any ODA allowable group)
150
PI Code
(16 Bits)
Check
Word +
Offset A
Block 2
Check
Word +
Offset B
Block 3
Check
Word +
Offset C
Block 4
Check
Word +
Offset D
Data
(16 Bits)
158
Data
(16 Bits)
156
Group
Type
Code
(4 Bits)
BT
0P
PTY
Code
(5 Bits)
Data
0
ODA Data
(5 Bits)
154
152
As specified
in ODA grp

FIG. 5

ODA Beacon and Data

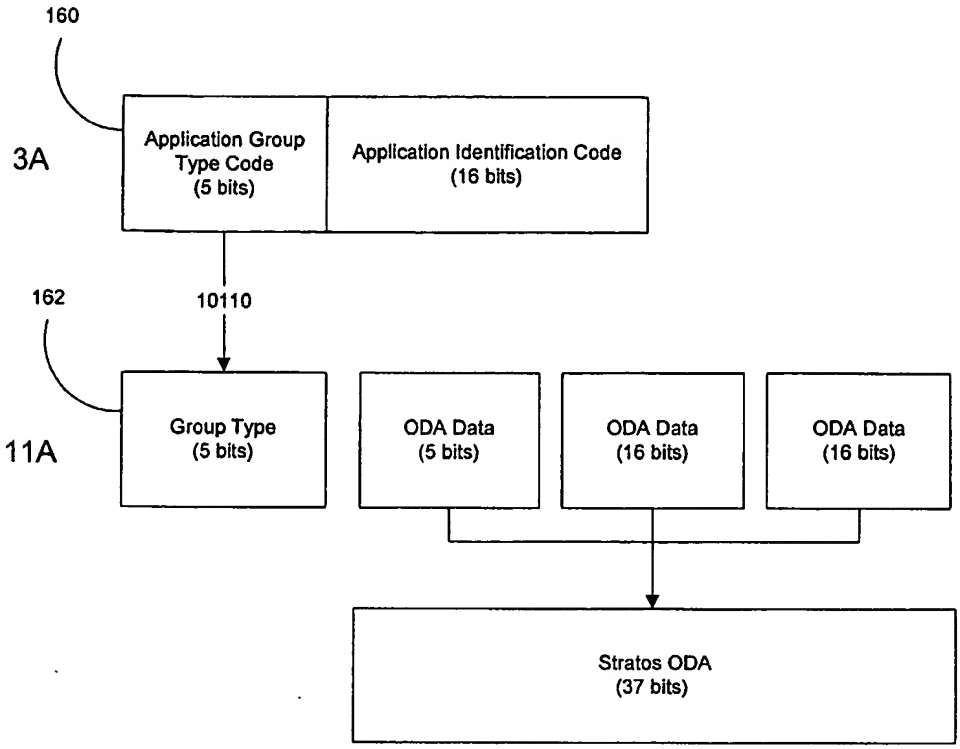
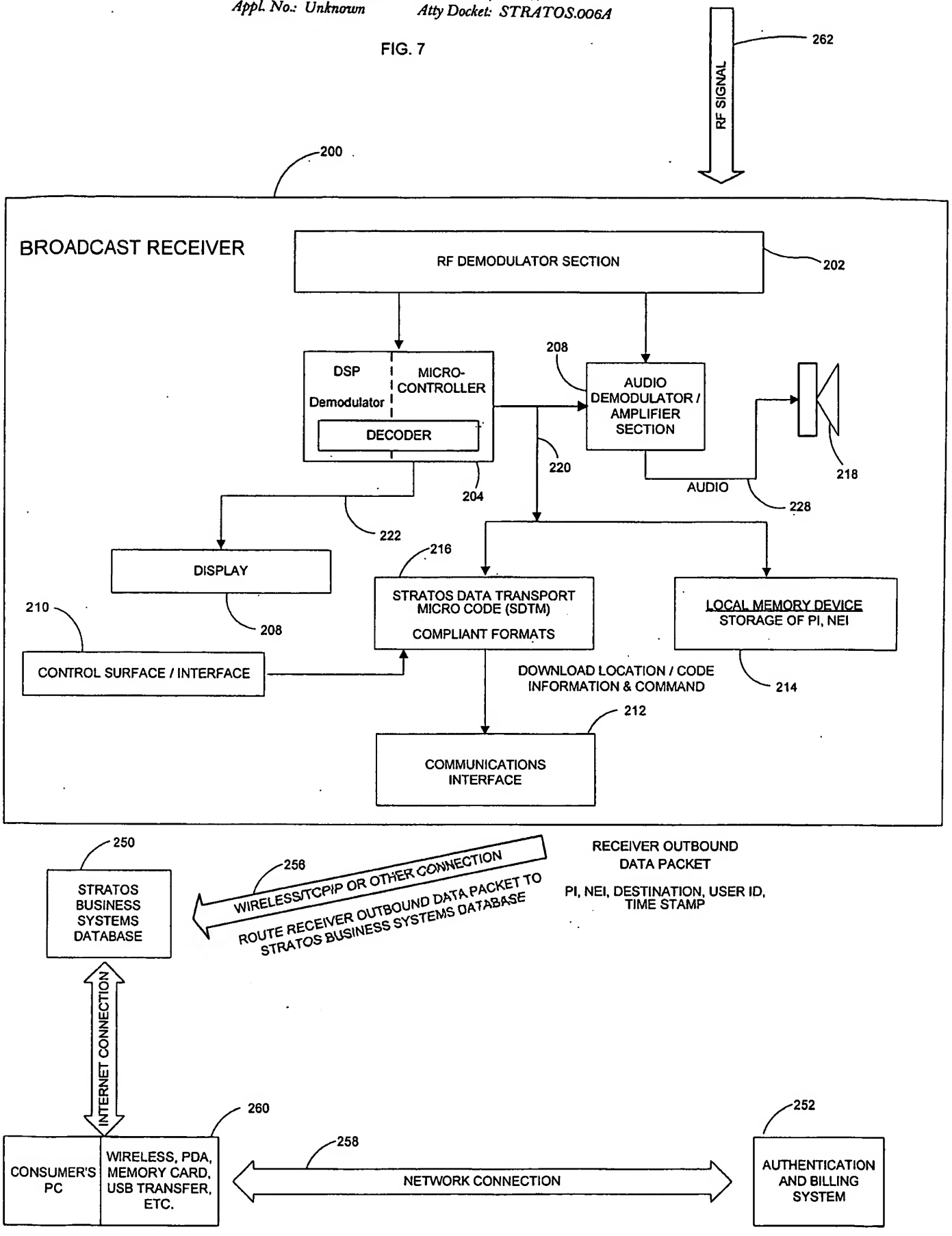


FIG. 6

FIG. 7


RF SIGNAL
262
200
BROADCAST RECEIVER
RF DEMODULATOR SECTION
202
DSP
Demodulator
MICRO-CONTROLLER
DECODER
208
AUDIO DEMODULATOR / AMPLIFIER SECTION
220
218
AUDIO
228
204
222
DISPLAY
216
STRATOS DATA TRANSPORT MICRO CODE (SDTM)
COMPLIANT FORMATS
LOCAL MEMORY DEVICE
STORAGE OF PI, NEI
210
208
CONTROL SURFACE / INTERFACE
DOWNLOAD LOCATION / CODE INFORMATION & COMMAND
214
212
COMMUNICATIONS INTERFACE
250
STRATOS BUSINESS SYSTEMS DATABASE
256
WIRELESS/TCP/IP OR OTHER CONNECTION
ROUTE RECEIVER OUTBOUND DATA PACKET TO STRATOS BUSINESS SYSTEMS DATABASE
RECEIVER OUTBOUND DATA PACKET
PI, NEI, DESTINATION, USER ID, TIME STAMP
INTERNET CONNECTION
260
CONSUMER'S PC
WIRELESS, PDA, MEMORY CARD, USB TRANSFER, ETC.
258
NETWORK CONNECTION
252
AUTHENTICATION AND BILLING SYSTEM

ODA Decode Software Flow

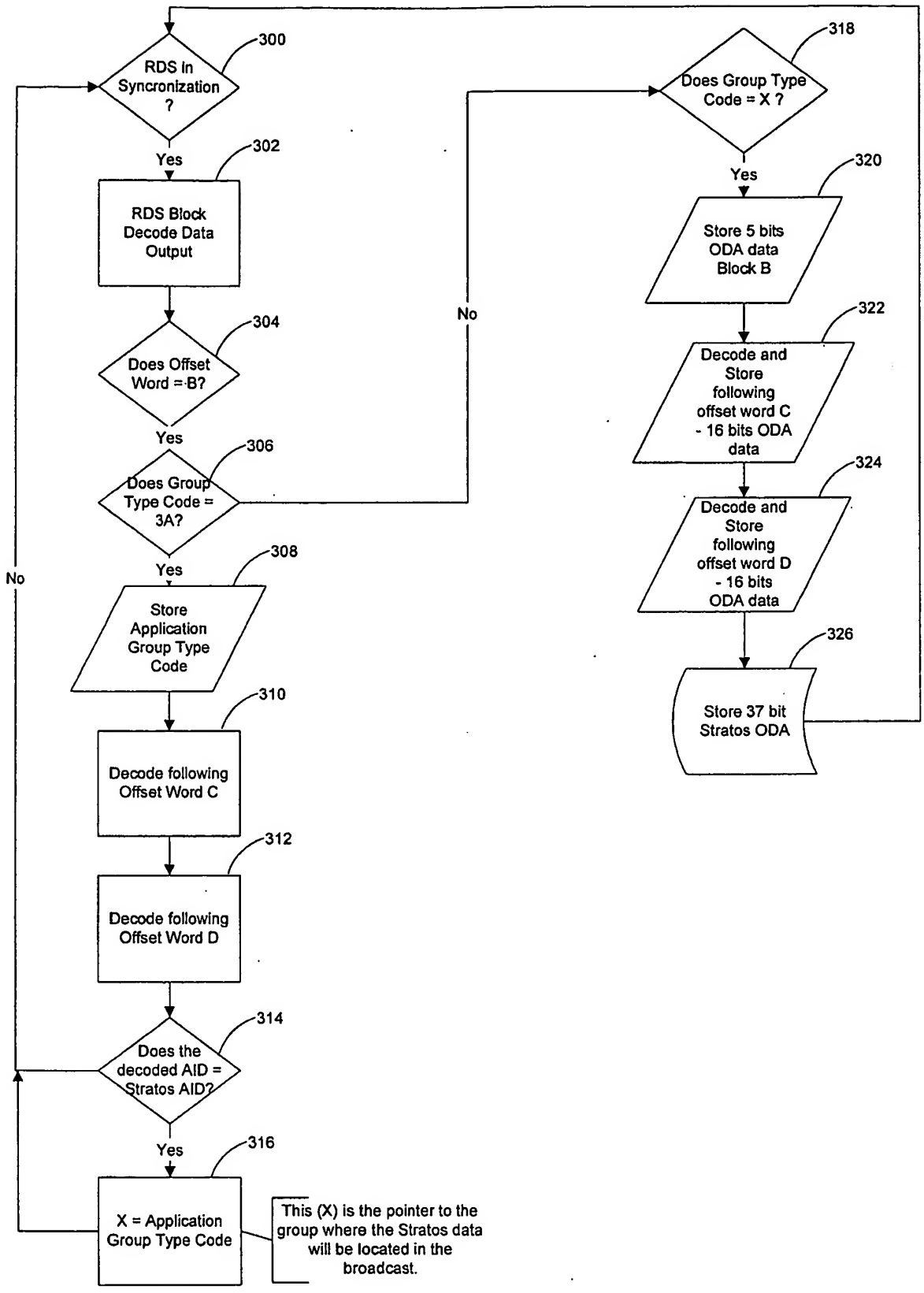


FIG. 8

Double Buffering

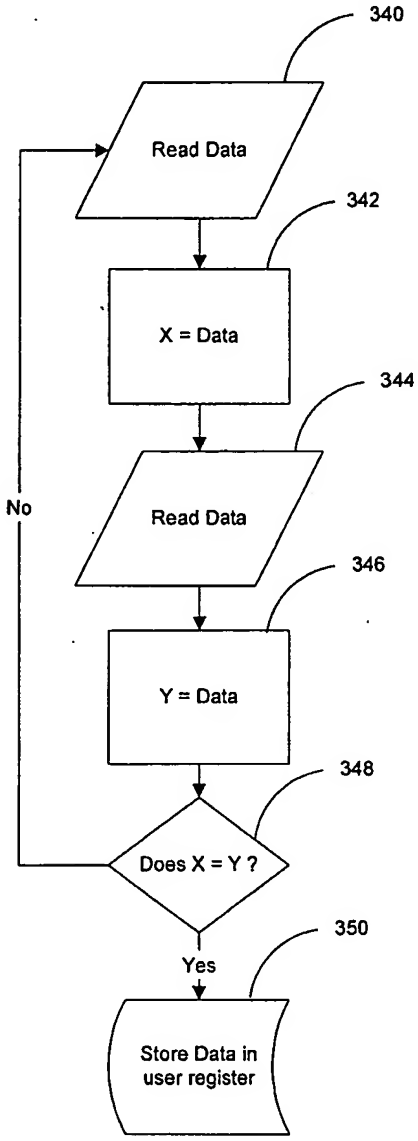


FIG. 9

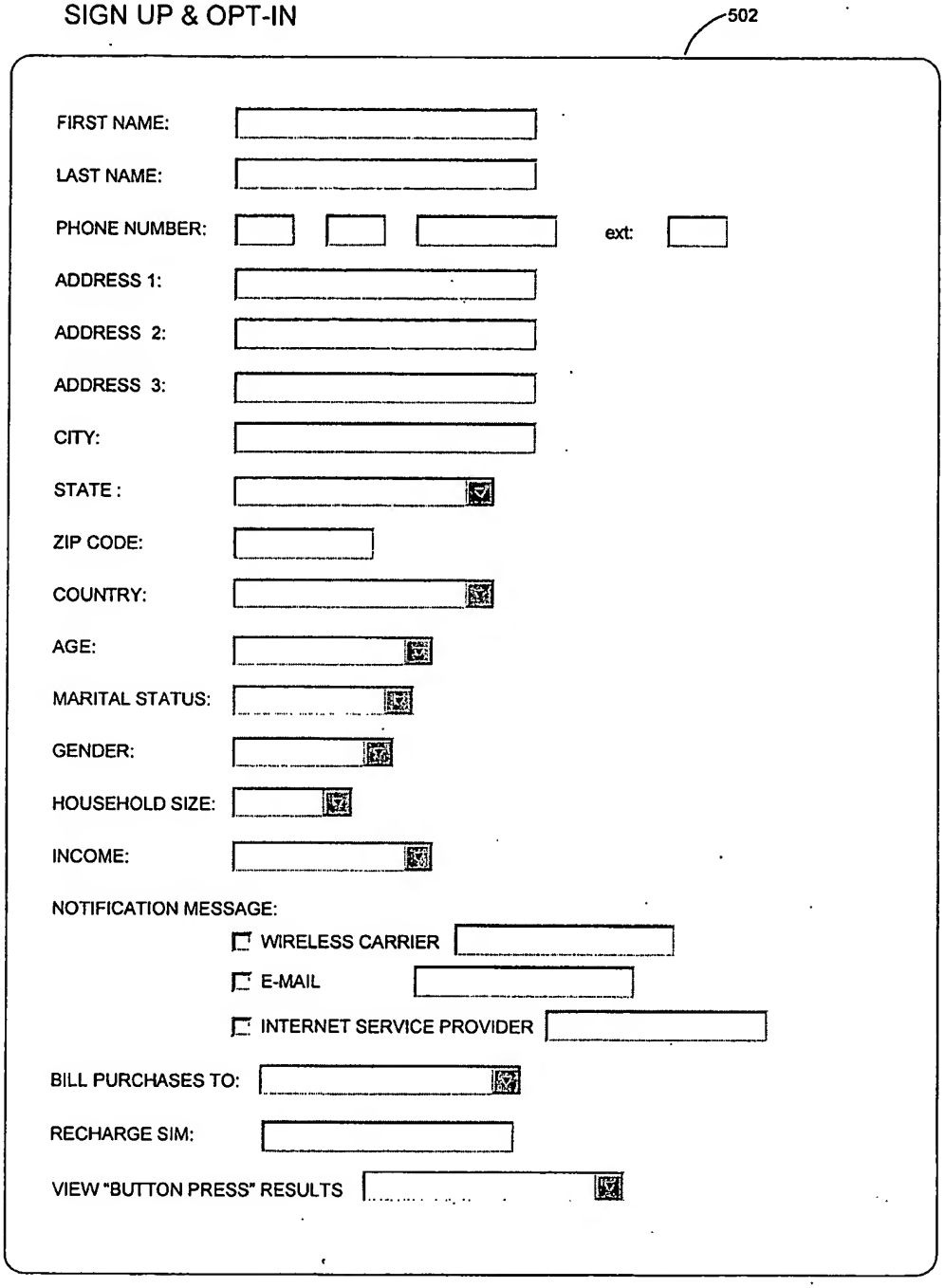

SIGN UP & OPT-IN
502
FIRST NAME:
LAST NAME:
PHONE NUMBER:
ext:
ADDRESS 1:
ADDRESS 2:
ADDRESS 3:
CITY:
STATE :
ZIP CODE:
COUNTRY:
AGE:
MARITAL STATUS:
GENDER:
HOUSEHOLD SIZE:
INCOME:
NOTIFICATION MESSAGE:
WIRELESS CARRIER
E-MAIL
INTERNET SERVICE PROVIDER
BILL PURCHASES TO:
RECHARGE SIM:
VIEW "BUTTON PRESS" RESULTS

FIG.10

PREMIUM INTERESTS

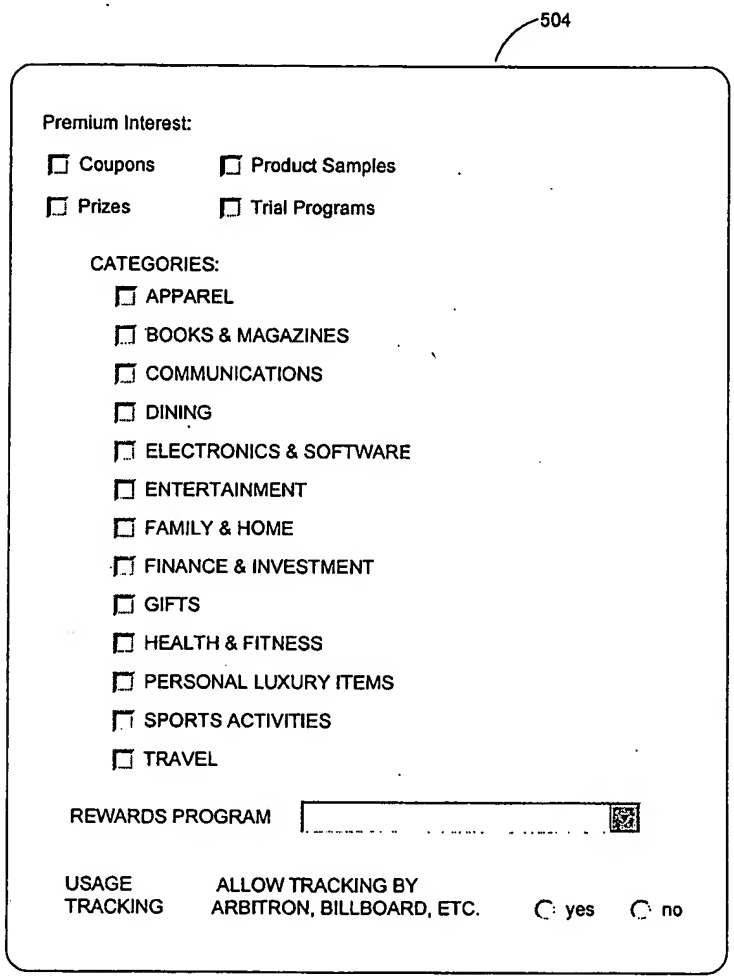


FIG.11

TICKET PROGRAM

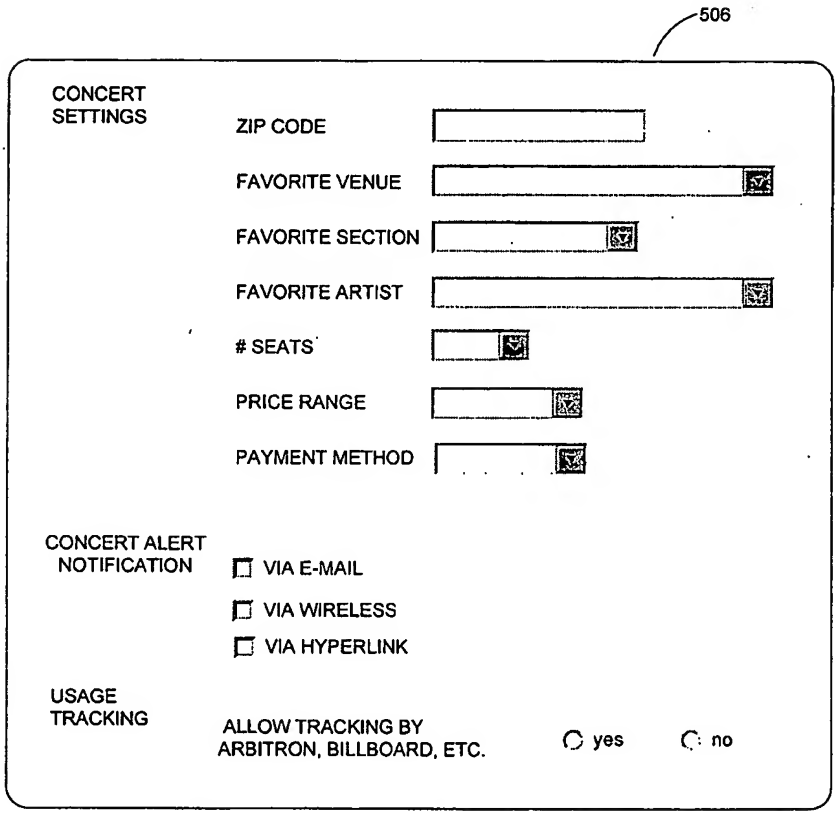


FIG.12

REAL TIME REPORTING

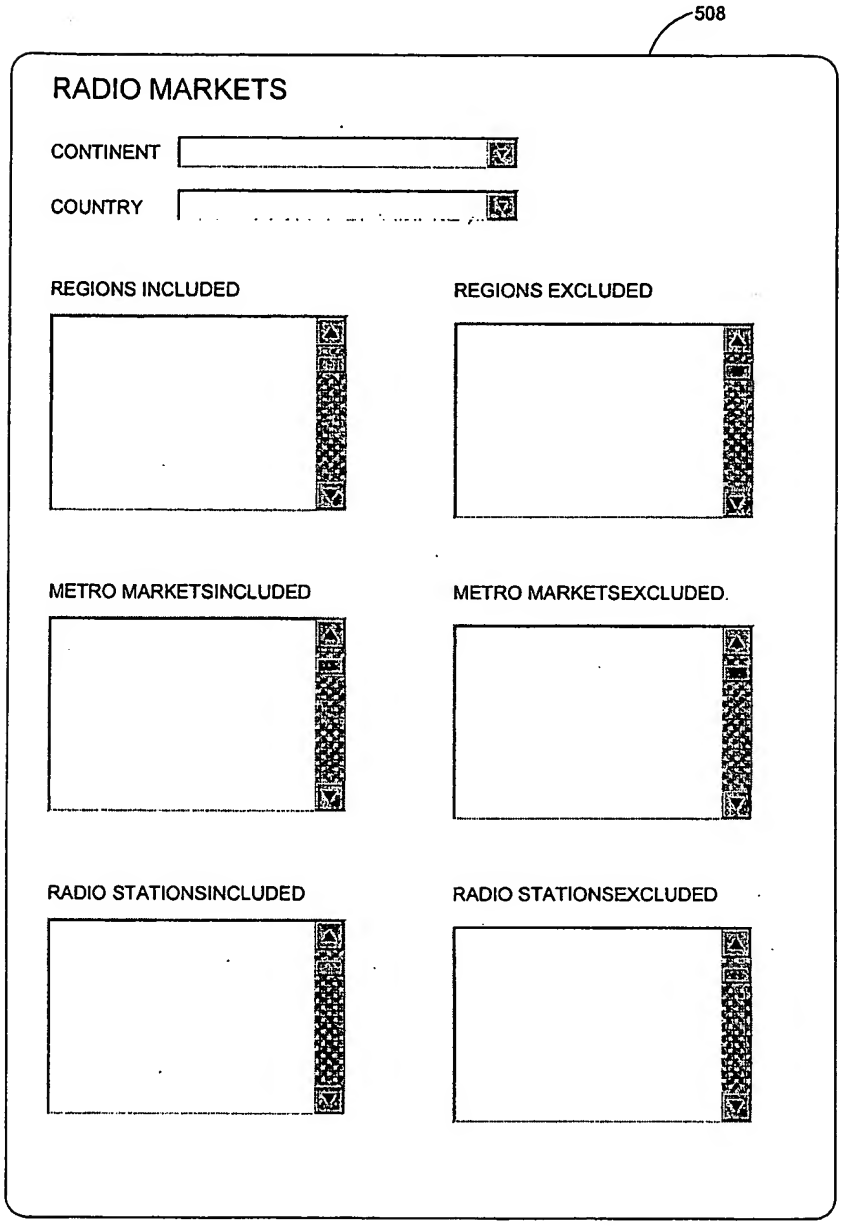


FIG.13

REAL TIME CHARTS & GRAPHS

510

CAMPAIGN NAME

RUN DATES

TO

INCLUDE MARKETS

RADIO STATIONS

SUCCESS TO DATE

X,XXX RESPONSES

YYY BUYS

CREATE A CUSTOM REPORT

NAME YOUR REPORT

SELECT MARKET

SELECT RADIO STATION

SELECT TIME

SELECT DEMOGRAPHICS

PROGRAM EVENT

EVENT

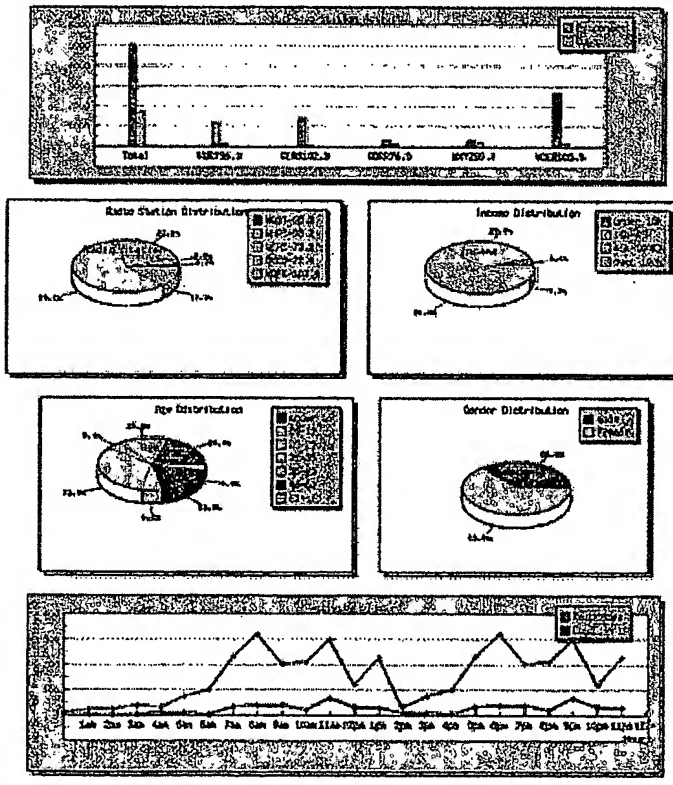
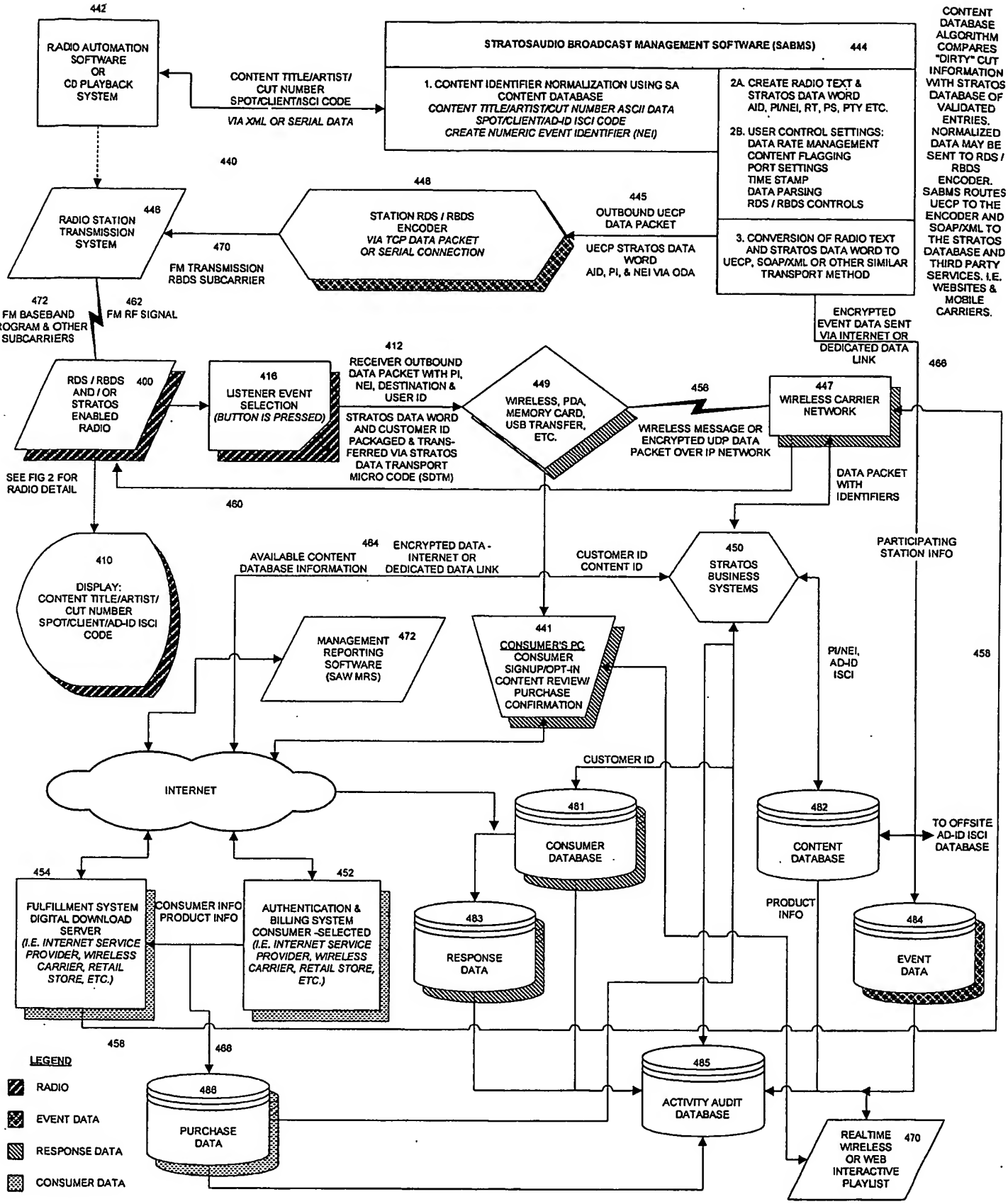


FIG.14

FIG. 15


442
RADIO AUTOMATION SOFTWARE OR CD PLAYBACK SYSTEM
CONTENT TITLE/ARTIST/ CUT NUMBER SPOT/CLIENT/ISCI CODE
VIA XML OR SERIAL DATA
STRATOSAUDIO BROADCAST MANAGEMENT SOFTWARE (SABMS) 444
1. CONTENT IDENTIFIER NORMALIZATION USING SA CONTENT DATABASE
CONTENT TITLE/ARTIST/CUT NUMBER ASCII DATA
SPOT/CLIENT/AD-ID ISCI CODE
CREATE NUMERIC EVENT IDENTIFIER (NEI)
2A. CREATE RADIO TEXT & STRATOS DATA WORD AID, PI/NEI, RT, PS, PTY ETC.
2B. USER CONTROL SETTINGS: DATA RATE MANAGEMENT CONTENT FLAGGING PORT SETTINGS TIME STAMP DATA PARSING RDS / RBDS CONTROLS
3. CONVERSION OF RADIO TEXT AND STRATOS DATA WORD TO UECP, SOAP/XML OR OTHER SIMILAR TRANSPORT METHOD
CONTENT DATABASE ALGORITHM COMPARES "DIRTY" CUT INFORMATION WITH STRATOS DATABASE OF VALIDATED ENTRIES. NORMALIZED DATA MAY BE SENT TO RDS / RBDS ENCODER. SABMS ROUTES UECP TO THE ENCODER AND SOAP/XML TO THE STRATOS DATABASE AND THIRD PARTY SERVICES. I.E. WEBSITES & MOBILE CARRIERS.
440
448
STATION RDS / RBDS ENCODER
VIA TCP DATA PACKET OR SERIAL CONNECTION
445
OUTBOUND UECP DATA PACKET
UECP STRATOS DATA WORD AID, PI, & NEI VIA ODA
446
RADIO STATION TRANSMISSION SYSTEM
470
FM TRANSMISSION RBDS SUBCARRIER
472
FM BASEBAND PROGRAM & OTHER SUBCARRIERS
462
FM RF SIGNAL
ENCRYPTED EVENT DATA SENT VIA INTERNET OR DEDICATED DATA LINK
466
412
RECEIVER OUTBOUND DATA PACKET WITH PI, NEI, DESTINATION & USER ID
STRATOS DATA WORD AND CUSTOMER ID PACKAGED & TRANSFERRED VIA STRATOS DATA TRANSPORT MICRO CODE (SDTM)
RDS / RBDS AND / OR STRATOS ENABLED RADIO 400
416
LISTENER EVENT SELECTION
(BUTTON IS PRESSED)
449
WIRELESS, PDA, MEMORY CARD, USB TRANSFER, ETC.
456
WIRELESS MESSAGE OR ENCRYPTED UDP DATA PACKET OVER IP NETWORK
447
WIRELESS CARRIER NETWORK
SEE FIG 2 FOR RADIO DETAIL
460
DATA PACKET WITH IDENTIFIERS
410
DISPLAY:
CONTENT TITLE/ARTIST/ CUT NUMBER SPOT/CLIENT/AD-ID ISCI CODE
464
AVAILABLE CONTENT DATABASE INFORMATION
ENCRYPTED DATA - INTERNET OR DEDICATED DATA LINK
CUSTOMER ID CONTENT ID
450
STRATOS BUSINESS SYSTEMS
PARTICIPATING STATION INFO
MANAGEMENT REPORTING SOFTWARE (SAW MRS) 472
441
CONSUMER'S PC
CONSUMER SIGNUP/OPT-IN CONTENT REVIEW/ PURCHASE CONFIRMATION
PI/NEI, AD-ID ISCI
458
CUSTOMER ID
INTERNET
481
CONSUMER DATABASE
482
CONTENT DATABASE
TO OFFSITE AD-ID ISCI DATABASE
454
FULFILLMENT SYSTEM DIGITAL DOWNLOAD SERVER
(I.E. INTERNET SERVICE PROVIDER, WIRELESS CARRIER, RETAIL STORE, ETC.)
CONSUMER INFO PRODUCT INFO
452
AUTHENTICATION & BILLING SYSTEM CONSUMER -SELECTED
(I.E. INTERNET SERVICE PROVIDER, WIRELESS CARRIER, RETAIL STORE, ETC.)
483
RESPONSE DATA
PRODUCT INFO
484
EVENT DATA
458
468
LEGEND
RADIO
EVENT DATA
RESPONSE DATA
CONSUMER DATA
486
PURCHASE DATA
485
ACTIVITY AUDIT DATABASE
REALTIME WIRELESS OR WEB INTERACTIVE PLAYLIST 470

PLAYLIST

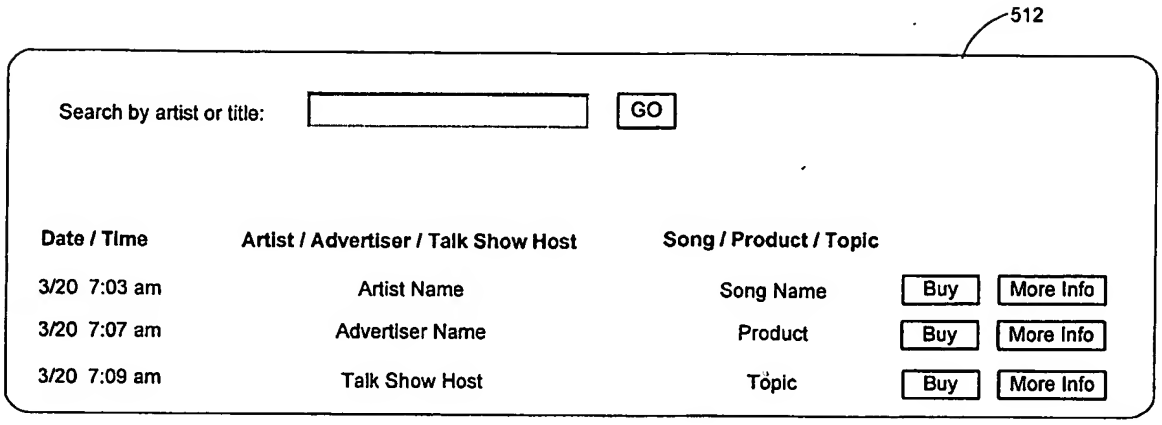


FIG.16

REDEMPTION

514

BUTTON PRESS RESULTS:

Date / Time	Source	Category		
3/20 7:03 am	Artist Name	Song Name	Buy	More Info
3/20 7:07 am	Advertiser Name	Product	Buy	More Info
3/20 7:09 am	Talk Show Host	Topic	Buy	More Info
3/20 7:13 am	Audience Poll	Topic		Results
3/20 7:14 am	Contest	Offer		More Info

FIG.17